HP recommends Windows® 7.

Z220 Workstation

More power, less energy, still affordable.

Our most affordable, no-compromise workstations.
The HP Z220 Series delivers workstation performance and energy efficiency at prices you'd expect from a desktop PC. You'll get the performance you need with next-generation Intel® Xeon® and Intel® Core™ processors, four integrated USB 3.0 ports, new professional graphics options, and enterprise-class memory technologies.

Choose an expansive Convertible Minitower (CMT) or a compact Small Form Factor (SFF) design that's 65% smaller—perfect for tight spaces. Either one fits your workspace and your work style.

Professional work demands professional graphics.
Experience a cost-effective graphics boost with the enhanced next-generation Intel® HD Graphics. For even greater performance, choose the latest PCIe Gen3 professional graphics cards from NVIDIA and AMD as they become available, taking advantage of the high-performance PCIe Gen3 x16 slot.

High performance. No sweat.
Increase performance and reduce energy consumption with next-generation 22nm processors, including the Intel® Xeon® processor E3-1200v2 family (with Intel® HD Graphics P4000 on selected processors) and 3rd generation Intel® Core™ processors.[1,2,3] Unleash your creativity without thinking twice about performance.

Get going at a moment's notice with the Intel® Smart Response Technology[4] (SRT) option that gives you faster boot up times and application responsiveness. Because no one should ever have to wait.

More Possibilities. More Productivity.
Connect to external storage devices and transfer data at blazing fast speeds using integrated USB 3.0.

Boost performance on memory intensive applications with up to 32GB of 1600MHz DDR3 memory[5] and enjoy the confidence of running even sophisticated models without slowing you down.

HP Z220 Workstations

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	HP Z220 CMT	HP Z220 SFF
Form Factor	Convertible minitower	Small Form Factor; convertible—may be used as desktop or tower; optional tower stand available; optional Integrated Work Center (IWC) available
Available Operating Systems	Genuine Windows® 7 Professional 32-Bit Genuine Windows® 7 Professional 64-bit Genuine Windows® 7 Ultimate 64-bit HP Linux Installer Kit SUSE Linux Enterprise Desktop 11 Red Hat Enterprise Linux Desktop/Workstation (1 year paper license; no preinstalled OS)	
Available Processors[1,2,3]		

Processor	GHz	Max Turbo GHz	Cache	Memory	Cores	Hyper-Threading[6]	Featuring Intel® vPro™ Technology	Intel® HD Graphics
Intel® Pentium processor G640	2.80	–	3 MB	1066 MHz	2	N	N	2000
Intel Core™ i7-3770 processor	3.40	3.90	8 MB	1600 MHz	4	Y	Y	4000
Intel Xeon® processor E3-1225v2	3.20	3.60	8 MB	1600 MHz	4	N	Y	P4000
Intel Xeon processor E3-1230v2	3.30	3.70	8 MB	1600 MHz	4	Y	Y	No
Intel Xeon processor E3-1240v2	3.40	3.80	8 MB	1600 MHz	4	Y	Y	No
Intel Xeon processor E3-1245v2	3.40	3.80	8 MB	1600 MHz	4	Y	Y	P4000
Intel Xeon processor E3-1270v2	3.50	3.90	8 MB	1600 MHz	4	Y	Y	No
Intel Xeon processor E3-1280v2	3.60	4.00	8 MB	1600 MHz	4	Y	Y	No
Intel Xeon processor E3-1290v2*	3.70	4.10	8 MB	1600 MHz	4	Y	Y	No

Chipset	Intel® C216 chipset	
Memory[5,7]	4 DIMM slots, up to 32 GB ECC/non-ECC, DDR3 1600 MHz (ECC/non-ECC choice and actual memory speed dependent on processor capability)	
Drive Controllers[8]	Integrated SATA Controller, RAID 0,1 supported: 4 ports 3 Gb/s, 2 ports 6 Gb/s	Integrated SATA Controller, RAID 0,1 supported: 2 ports 3 Gb/s, 2 ports 6 Gb/s
Storage[9]	Up to (3) 3.5-inch 7200 rpm SATA drives: 250, 500 GB, 1, 2 TB (6 TB max) Up to (3) 2.5-inch 10K rpm SATA drives: 300 GB (0.9 TB max) Up to (3) 2.5-inch SATA solid state drives: 128, 160, 256, 300 GB (0.9 TB max)	Up to (2) 3.5-inch 7200 rpm SATA drives: 250, 500 GB, 1, 2 TB (4 TB max) Up to (2) 2.5-inch 10K rpm SATA drives: 300 GB (0.6 TB max) Up to (2) 2.5-inch SATA SSD drives: 128, 160, 256, 300 GB (0.6 TB max)
Optical Storage[10,11]	DVD-ROM, DVD+/-RW DL Super Multi, HP Blu-ray Writer, HP 22-in-1 Media Card Reader	
Drive Bays	3 external 5.25-inch bays, 3 internal 3.5-inch HDD bays	1 internal 3.5-inch bay, and 1 shared with external 3.5-inch bay; 1 external 5.25-inch bay
Expansion Slots	1 PCIe Gen3 x16 slot, 1 PCIe Gen2 x4 slot/x16 connector, 1 PCIe Gen2 x4 slot/x8 connector, 2 PCIe Gen2 x1 slots, 2 PCI slots	1 PCIe Gen3 x16 slot, 1 PCIe Gen2 x4 slot /x16 connector, 2 PCIe Gen2 x1 slots, 1 PCI slot (all slots are Low Profile)
Available Graphics	Integrated Graphics: Intel® HD Graphics available on select processors as above Professional 2D: AMD FirePro 2270, NVIDIA NVS 300, NVIDIA Quadro NVS 310 Entry 3D: AMD FirePro V3900, AMD FirePro V4900, NVIDIA Quadro 410, NVIDIA Quadro 600 Mid-range 3D: AMD FirePro V5900, AMD FirePro V7900 (AMO** only), NVIDIA Quadro 2000 High-end 3D: NVIDIA Quadro 4000 (AMO** only)	Integrated Graphics: Intel® HD Graphics available on select processors as above Professional 2D: AMD FirePro 2270, NVIDIA NVS 300, NVIDIA Quadro NVS 310 Entry 3D: AMD FirePro V3900, NVIDIA Quadro 410, NVIDIA Quadro 600
Audio	High Definition Integrated Realtek ALC221 Audio and integrated speaker; optional Creative Reon 3D PCIe Audio Card; optional HP Thin USB Powered Speakers	High Definition Integrated Realtek ALC221 Audio and integrated speaker, optional HP Thin USB Powered Speakers
Network	Intel 82579 GbE Network Connection	
Remote Management	Intel® vPro™ with Intel® AMT 8.0	
Ports	Front: 2 USB 3.0, 1 USB 2.0, 1 IEEE 1394a (optional with PCIe card), 1 microphone in, 1 headphone out Rear: 2 USB 3.0, 4 USB 2.0, 1 audio in, 1 audio out, 1 serial (optional), 1 parallel (optional); 1 microphone in, 1 DVI-I single link and 1 DisplayPort (for use with Intel HD Graphics); optional 2 rear IEEE 1394b ports (PCIe card) Internal: 5 USB 2.0 ports	Front: 4 USB 2.0, 1 microphone in, 1 headphone out Rear: 4 USB 3.0, 2 USB 2.0, 1 audio in, 1 audio out, 1 standard/1 optional serial port, 1 parallel (optional); 2 PS/2, RJ-45 (NIC), 1 VGA and 1 DisplayPort (for use with Intel HD Graphics); optional 2 rear IEEE 1394b ports (PCIe card) Internal: 4 USB 2.0 ports
Input Devices	HP PS/2 keyboard, HP USB keyboard, HP USB CCID smart card keyboard, HP PS/2 mouse, HP USB optical mouse, HP USB 3-button optical mouse, HP USB laser mouse, USB SpaceExplorer, USB SpacePilot	
Dimensions (H x W x D)	17.6 x 7 x 17.9 in (44.76 x 17.78 x 45.43 cm)	Standard desktop orientation: 3.95 x 13.3 x 15.0 in (10.0 x 33.8 x 38.1 cm)
Power Supply	400-watt 90% efficient power supply	240-watt 90% efficient power supply
Compatible Displays (screen size diagonally measured)	HP DreamColor LP2480zx Professional Display (24-inch diagonal widescreen), HP ZR30w 30-inch S-IPS LCD Monitor, HP ZR2740w 27-inch LED Backlit IPS Monitor, HP ZR2440w 24-inch LED Backlit IPS Monitor, HP ZR24w 24-inch S-IPS LCD Monitor, HP LP2475w 24-inch Widescreen LCD Monitor, HP ZR2240w 21.5-inch LED Backlit IPS Monitor, HP ZR22w 21.5-inch S-IPS LCD Monitor, HP ZR2040w 20-inch LED Backlit IPS Monitor	
Warranty[12]	Limited three-year Mon-Fri 8-5 next business day, parts, labor and 24x7 phone support, terms and conditions may vary. One-year warranty option available in selected countries.	

Screen images courtesy of Autodesk

* HP Z220 CMT only

** After-Market Option

1 Dual-Core and Quad-Core technologies are designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefits; Not all customers or software applications will necessarily benefit from use of these technologies.

2 64-bit computing on Intel architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See http://www.intel.com/info/em64t for more information.

3 Intel's numbering is not a measurement of higher performance.

4 Requires a 2nd gen Intel® Core™ processor, enabled chipset, Intel Rapid Storage technology software, and a properly configured hybrid drive (HDD + small SSD). Intel® Smart Response Technology is sold as an optional feature and is only available on HP's 2012 Workstations, HP EliteBooks and HP UltraBook. Depending on system configuration, your results may vary.

5 Each processor supports up to 2 channels of DDR3 memory. To realize full performance at least 1 DIMM must be inserted into each channel.

6 The hyper-threading feature is designed to improve performance of multi-threaded software products; please contact your software provider to determine software compatibility. Not all customers or software applications will benefit from the use of hyperthreading. Go to http://www.intel.com/info/hyperthreading for more information, including which processors support HT Technology.

7 Intel® Xeon E3 and Intel Pentium processors can support either ECC or non-ECC memory. Intel Core i5/i7 processors only support non-ECC memory.

8 SATA hardware RAID is not supported on Linux systems. The Linux kernel, with built-in software RAID, provides excellent functionality and performance. It is a good alternative to hardware-based RAID. Please visit http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00060684/c00060684.pdf for RAID capabilities with Linux.

9 For hard drives, 1 GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 8 GB of hard drive (or system disk) is reserved for the system recovery software for Windows XP and XP Pro, up to 12 GB for Windows Vista, and up to 20 GB for Windows 7.

10 Actual speeds may vary. Does not permit copying of commercially available DVD movies or other copyright protected materials. Intended for creation and storage of your original material and other lawful uses. Note that DVD-RAM cannot read or write to 2.6 GB Single Sided/5.2 GB Double Sided – Version 1.0 media.

11 As Blu-ray is a new format containing new technologies, certain disc, digital connection, compatibility and/or performance issues may arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. In order for some Blu-ray titles to play, they may require a DVI or HDMI digital connection and your display may require HDCP support. HD DVD movies cannot be played on this workstation.

12 HP Care Pack Services extend service contracts beyond the standard warranties. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at http://www.hp.com/go/lookuptool. Additional HP Care Pack Services information by product is available at http://www.hp.com/go/carepack. Service levels and response times for HP Care Packs may vary depending on your geographic location.

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4AA4-1624ENW, May 2012